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Statistical Analysis of the Annual Average F.O.B. Prices of  
Canned Apricots, 1926-27 to 1950-51

by

Sidney Hoos

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Statistical Analysis of the Annual Average F.O.B. Prices of  
Canned Apricots, 1926-27 to 1950-51

Sidney Hoos<sup>1/</sup>

The purpose of this report is to present the results of a statistical analysis of the major factors which have influenced the annual average f.o.b. prices received for canned apricots by canners in California from 1926-27 through 1950-51. The years 1941-42 through 1946-47 were excluded from the analysis because of the abnormal conditions which prevailed during the war years, such as federal price control, and in 1946-47 when a large proportion of canner shipments went into the refilling of the supply pipe line rather than into consumers' hands.

In this analysis the average relationships which prevailed between the f.o.b. prices of canned apricots and three factors were measured. These three factors are (1) total domestic shipments of California canned apricots; (2) index of non-agricultural income payments in the United States; and (3) adjusted index of prices of competing canned fruits.

The average relations which have prevailed between the f.o.b. price and each of the independent variables, for the period considered, may be summarized as follows:

- (a) A change of one million cases in domestic shipments of California canned apricots, with nonagricultural income and with competing canned fruit prices held constant, was on the average accompanied by a change in the opposite direction of about 40 cents a case in the f.o.b. price of canned apricots.
- (b) An increase of 10 per cent in the index of nonagricultural income in the United States, with domestic shipments of California canned

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<sup>1/</sup> Professor of Agricultural Economics, Agricultural Economist in the Experiment Station and on the Giannini Foundation.



Statistical Analysis of the Annual Average F.O.B. Prices of  
Canned Apricots, 1930-37 to 1950-51

Sidney Hoos

The purpose of this report is to present the results of a statistical

analysis of the major factors which have influenced the annual average f.o.b.

prices received for canned apricots by canners in California from 1930-37 through

1950-51. The years 1941-42 through 1946-47 were excluded from the analysis be-

cause of the abnormal conditions which prevailed during the war years, such as

federal price control, and in 1946-47 when a large proportion of canned shipments

went into the refilling of the supply pipe line rather than into consumers' hands.

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are (1) total domestic shipments of California canned apricots; (2) index of non-

agricultural income payments in the United States; and (3) adjusted index of

prices of competing canned fruit.

The average relations which have prevailed between the f.o.b. price and each

of the independent variables, for the period considered, may be summarized as

follows:

(a) A change of one million cases in domestic shipments of California

canned apricots, with nonagricultural income and with competing

canned fruit prices held constant, was on the average accompanied

by a change in the opposite direction of about 10 cents a case

in the f.o.b. price of canned apricots.

(b) An increase of 10 per cent in the index of nonagricultural income

in the United States, with domestic shipments of California canned



apricots and with prices of competing canned fruits held constant, was on the average accompanied by an increase of about 32 cents a case in the f.o.b. price of California canned apricots.

- (c) An increase of 10 per cent in the adjusted index of prices of competing canned fruits, with domestic shipments of California canned apricots and with nonagricultural income held constant, was on the average accompanied by an increase of about 29 cents a case in the f.o.b. price of California canned apricots.

Differences between the actual prices and those explained by the statistical analysis are given in table 4, column 3.

The f.o.b. prices of canned apricots used in the report are industry average prices; they are based on records of canners and reflect actual operations of the canneries packing apricots in California.

The domestic movement of canned apricots from California canners has been derived from statistics issued by the Canners League of California; the total movement from canneries has been adjusted for exports to derive the movement to the domestic market.

The index of United States nonagricultural income is based on reports issued by the United States Department of Commerce. At the time the analysis was made, nonagricultural income figures for the 1949-50 season were available only through April, 1951. Hence, for the nonagricultural income figure used for the 1950-51 marketing year in the analysis, it has been necessary to estimate the value for May, 1951; it has been estimated at the value of April, 1951.

The level of competing canned fruit prices has been measured by an index constructed in the same manner as in the previous reports on canned apricots; the construction of the index is explained in some detail in table 3 appended to this report. Here, it may be noted that the f.o.b. prices of canned Bartlett pears are based on reports from California and Northwest canneries and reflect



apricots and with prices of competing canned fruits held constant, was on the average accompanied by an increase of about 32 cents a case in the f.o.b. price of California canned apricots.

(c) An increase of 10 per cent in the adjusted index of prices of competing canned fruits, with domestic shipments of California canned apricots and with nonagricultural income held constant, was on the average accompanied by an increase of about 29 cents a case in the f.o.b. price of California canned apricots.

Differences between the actual prices and those explained by the statistical

analysis are given in table 4, column 3.

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The level of competing canned fruit prices has been measured by an index constructed in the same manner as in the previous reports on canned apricots; the construction of the index is explained in some detail in table 3 appended to this report. Here, it may be noted that the f.o.b. prices of canned Bartlett pears are based on reports from California and Northwest canneries and reflect



actual operations of Pacific Coast canneries packing Bartlett pears. The f.o.b. prices of canned clingstone peaches are based on reports from California canners and also reflect actual operations of the packers. The prices for canned Bartlett pears and canned apricots were compiled by the Canners League of California, and the prices of canned clingstone peaches were compiled by the Cling Peach Advisory Board. The prices of canned Hawaiian pineapple are based on published quotations supplemented by available trade information.

Specific sources for the several series of data used in the analysis, and more detailed specifications, are noted in the explanatory footnotes to tables 1, 2, and 3 appended to this report.



actual operations of Pacific Coast Canneries packing Bartlett pears. The L.C.D. prices of canned clingstone pears are based on reports from California canners and also reflect actual operations of the packers. The prices for canned Bartlett pears and canned apricots were compiled by the Canners League of California, and the prices of canned clingstone pears were compiled by the Cling Peach Advisory Board. The prices of canned Hawaiian pineapples are based on published quotations supplemented by available trade information.

Specific sources for the several series of data used in the analysis, and more detailed specifications, are noted in the explanatory footnotes to tables 1, 2, and 3 appended to this report.



TABLE 1

Statistical Analysis of Annual Average F.O.B.  
 Prices of California Canned Apricots  
 Variables Used in the Analyses  
 (1926-27 Through 1950-51, Excluding 1940-41 Through 1946-47)

Year, June through May	F.o.b. price canned apricots	Domestic shipments of canned apricots	Index of United States nonagricultural income	Adjusted index of prices of competing canned fruits
	1	2	3	4
	dollars per case	1,000 cases <sup>a</sup> /	1935-1939 = 100	
1926-27	3.85	2,038	115.3	120.0
1927-28	3.97	1,779	116.2	108.7
1928-29	3.67	2,195	120.7	104.7
1929-30	3.97	2,259	120.2	124.0
1930-31	3.32	2,183	104.4	108.0
1931-32	2.64	1,541	85.5	108.4
1932-33	2.23	1,521	68.1	118.9
1933-34	2.37	2,034	75.5	123.3
1934-35	3.47	1,477	82.1	124.8
1935-36	2.93	1,951	91.0	108.1
1936-37	2.75	2,992	106.5	94.9
1937-38	3.02	2,901	103.3	106.0
1938-39	2.55	2,562	101.0	90.8
1939-40	2.77	2,640	109.6	90.5
1947-48	5.20	2,415	285.9	64.5
1948-49	4.55	3,528	304.7	64.4
1949-50	4.11	3,072	305.2	52.9
1950-51 <sup>b</sup>	4.83	3,572	346.5	56.1

<sup>a</sup>/ No. 2½ can basis.

<sup>b</sup>/ Preliminary, subject to revision.

Sources:

Col. 1: Compiled from reports by canners. Prices are weighted average f.o.b. prices received by canners, for all grades and sizes of cans, on an unadvertised basis.

Col. 2: Column 7, table 2.

Col. 3: Simple average of the pack-year monthly indices of national nonagricultural income, 1935-1939 average equals 100. Monthly income data compiled from U. S. Department of Commerce, Survey of Current Business. Index for May 1951 estimated at a level of April 1951.

Col. 4: For sources and method of construction, see table 3.



Statistical Analysis of Annual Average F.O.B.  
Prices of California Canned Apricots  
Variables Used in the Analysis  
(1926-27 through 1950-51, Excluding 1940-41 through 1945-47)

Year, June through May	F.O.B. price canned apricots	Domestic shipments of canned apricots	Index of United States nonagricultural income	Adjusted index of prices of competing canned fruits
	1	2	3	4
	dollars per case	1,000 cases	1935-1939 = 100	
1926-27	3.82	2,038	115.3	120.0
1927-28	3.97	1,779	116.2	108.7
1928-29	3.67	2,192	120.7	101.7
1929-30	3.97	2,229	120.2	121.0
1930-31	3.32	2,183	101.1	108.0
1931-32	2.61	1,511	82.2	108.1
1932-33	2.23	1,221	68.1	118.9
1933-34	2.37	2,031	72.2	123.3
1934-35	3.17	1,477	82.1	121.8
1935-36	2.93	1,921	91.0	108.1
1936-37	2.72	2,922	106.2	91.9
1937-38	3.02	2,901	103.3	106.0
1938-39	2.22	2,262	101.0	90.8
1939-40	2.17	2,610	109.6	90.2
1947-48	2.20	2,112	282.9	61.2
1948-49	4.22	3,228	301.7	61.1
1949-50	4.11	3,072	302.2	52.9
1950-51 <sup>a</sup>	4.83	3,272	310.2	56.1

a/ No. 2 1/2 can basis.

b/ Preliminary, subject to revision.

Sources:

Col. 1: Compiled from reports by canners. Prices are weighted average F.O.B. prices received by canners, for all grades and sizes of cans, on an undratted basis.

Col. 2: Column 2, table 12.

Col. 3: Simple average of the back-year monthly indices of national nonagricultural rural income, 1935-1939 average equals 100. Monthly income data compiled from U. S. Department of Commerce, Survey of Current Business. Index for May 1931 estimated at a level of April 1931.

Col. 4: For sources and method of construction, see table 3.



TABLE 2

## California Canned Apricots: Pack, Carry-Over and Shipments

Year, June through May	Pack	Carry-over from preceding year	Available for shipment	Carry-over into following year	Total shipments	Exports	Domestic shipments
	1	2	3	4	5	6	7
	1,000 cases (24 - No. 2½ basis)						
1926-27	3,227	21	3,248	401	2,847	809	2,038
1927-28	2,960	401	3,361	952	2,409	630	1,779
1928-29	1,991	952	2,943	154	2,789	594	2,195
1929-30	4,023	154	4,177	1,189	2,988	729	2,259
1930-31	1,954	1,189	3,143	546	2,597	414	2,183
1931-32	2,006	546	2,552	515	2,037	496	1,541
1932-33	1,805	515	2,320	323	1,997	476	1,521
1933-34	2,416	323	2,739	167	2,572	538	2,034
1934-35	1,774	167	1,941	227	1,714	237	1,477
1935-36	3,164	227	3,391	844	2,547	596	1,951
1936-37	2,899	844	3,743	228	3,515	523	2,992
1937-38	5,553	228	5,781	2,305	3,476	575	2,901
1938-39	1,547	2,305	3,852	528	3,324	762	2,562
1939-40	3,338	528	3,866	479	3,387	747	2,640
1947-48	3,063	279	3,342	639	2,703	288	2,415
1948-49	4,651	639	5,290	1,508	3,782	254	3,528
1949-50	2,307	1,508	3,815	532	3,283	211	3,072
1950-51 <sup>a/</sup>	3,661	532	4,193	115	4,078	129	3,572 <sup>b/</sup>

<sup>a/</sup> Preliminary, subject to revision.

<sup>b/</sup> Excludes United States government (Quartermaster) purchases of 375,564 cases; if government purchases were included, total domestic shipments would be 3,948,000 cases.

## Sources:

Cols. 1 through 5: Compiled by Cannery League of California.

Col. 6: U. S. Department of Commerce, Monthly Summary of Foreign Commerce (April-May 1951 estimated) converted at 45 pounds per case of 24 No. 2½ cans.

Col. 7: Column 5 minus column 6.



TABLE 2

Summary of Cases, 1911-1912

Case No.	Name of Defendant	Date of Arrest	Date of Trial	Verdict	Sentence	Remarks
1	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
2	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
3	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
4	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
5	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
6	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
7	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
8	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
9	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	
10	John Doe	Jan. 1, 1911	Jan. 10, 1911	Guilty	1 year	

1. Preliminary, subject to revision.

2. Government purchases were included, total amounting to \$100,000.

3. Cases 1 through 5: Compiled by Cannery League of California.

Col. 6: U. S. Department of Commerce, Monthly Summary of Foreign Trade.  
 Col. 7: Column 5 minus column 6.



TABLE 3

## Construction of Index Prices of Canned Fruits Competing with Canned Apricots

Year, June through May	Prices			Relatives of prices			Unadjusted index of prices of compet- ing canned fruits	Index of United States nonagricultural income	Adjusted in- dex of prices of competing canned fruits
	Canned clingstone peaches	Canned Bartlett pears	Canned Hawaiian pineapple	Canned clingstone peaches	Canned Bartlett pears	Canned Hawaiian pineapple			
	1	2	3	4	5	6	7	8	9
	dollars per case			1935-1939 = 100					
1926-27	3.66	4.31	4.70	142.2	144.1	130.6	138.4	115.3	120.0
1927-28	3.17	4.60	4.20	123.2	153.8	116.7	126.3	116.2	108.7
1928-29	3.22	4.13	4.40	125.1	138.1	122.2	126.4	120.7	104.7
1929-30	4.08	4.82	4.70	158.5	161.2	130.6	149.1	120.2	124.0
1930-31	2.88	3.53	4.00	111.9	118.1	111.1	112.7	104.4	108.0
1931-32	2.55	2.82	3.00	99.1	94.3	83.3	92.7	85.5	108.4
1932-33	1.97	2.48	3.10	76.5	82.9	86.1	81.0	68.1	118.9
1933-34	2.31	2.64	3.60	89.7	88.3	100.0	93.1	75.5	123.3
1934-35	2.69	3.05	3.60	104.5	102.0	100.0	102.5	82.1	124.8
1935-36	2.51	2.92	3.60	97.5	97.7	100.0	98.4	91.0	108.1
1936-37	2.66	2.92	3.60	103.3	97.7	100.0	101.1	106.5	94.9
1937-38	2.96	3.07	3.80	115.0	102.7	105.6	109.5	103.3	106.0
1938-39	2.30	2.77	3.40	89.4	92.6	94.4	91.7	101.0	90.8
1939-40	2.44	3.27	3.60	94.8	109.4	100.0	99.2	109.6	90.5
1947-48	4.70	7.07	5.80	182.6	236.5	161.1	184.5	285.9	64.5
1948-49	4.86	7.37	6.50	188.8	246.5	180.6	196.1	304.7	64.4
1949-50	3.94	5.15	6.00	153.1	172.2	166.7	161.3	305.2	52.9
1950-51 <sup>a/</sup>	4.98	6.90	6.40	193.5	230.8	177.8	194.5	346.5	56.1

<sup>a/</sup> Preliminary, subject to revision.

## Sources:

Cols. 1 and 2: Compiled from reports by canners. Prices are weighted average f.o.b. prices for all grades and sizes of cans, on an unadvertised basis. Canned clingstone peach prices are for California; and canned Bartlett pear prices are for the Pacific Coast, except 1947-48 is for California.

(Continued on next page.)



The following table shows the results of the tests conducted on the various samples of the material under consideration. The results are given in terms of the percentage of the material which is found to be of the various grades. The results are given in the following table:

No. of tests	Grade 1		Grade 2		Grade 3		Total	Percentage
	Tests	Results	Tests	Results	Tests	Results		
1	100	100	100	100	100	100	300	100
2	100	100	100	100	100	100	300	100
3	100	100	100	100	100	100	300	100
4	100	100	100	100	100	100	300	100
5	100	100	100	100	100	100	300	100
6	100	100	100	100	100	100	300	100
7	100	100	100	100	100	100	300	100
8	100	100	100	100	100	100	300	100
9	100	100	100	100	100	100	300	100
10	100	100	100	100	100	100	300	100
11	100	100	100	100	100	100	300	100
12	100	100	100	100	100	100	300	100
13	100	100	100	100	100	100	300	100
14	100	100	100	100	100	100	300	100
15	100	100	100	100	100	100	300	100
16	100	100	100	100	100	100	300	100
17	100	100	100	100	100	100	300	100
18	100	100	100	100	100	100	300	100
19	100	100	100	100	100	100	300	100
20	100	100	100	100	100	100	300	100
21	100	100	100	100	100	100	300	100
22	100	100	100	100	100	100	300	100
23	100	100	100	100	100	100	300	100
24	100	100	100	100	100	100	300	100
25	100	100	100	100	100	100	300	100
26	100	100	100	100	100	100	300	100
27	100	100	100	100	100	100	300	100
28	100	100	100	100	100	100	300	100
29	100	100	100	100	100	100	300	100
30	100	100	100	100	100	100	300	100
31	100	100	100	100	100	100	300	100
32	100	100	100	100	100	100	300	100
33	100	100	100	100	100	100	300	100
34	100	100	100	100	100	100	300	100
35	100	100	100	100	100	100	300	100
36	100	100	100	100	100	100	300	100
37	100	100	100	100	100	100	300	100
38	100	100	100	100	100	100	300	100
39	100	100	100	100	100	100	300	100
40	100	100	100	100	100	100	300	100
41	100	100	100	100	100	100	300	100
42	100	100	100	100	100	100	300	100
43	100	100	100	100	100	100	300	100
44	100	100	100	100	100	100	300	100
45	100	100	100	100	100	100	300	100
46	100	100	100	100	100	100	300	100
47	100	100	100	100	100	100	300	100
48	100	100	100	100	100	100	300	100
49	100	100	100	100	100	100	300	100
50	100	100	100	100	100	100	300	100
51	100	100	100	100	100	100	300	100
52	100	100	100	100	100	100	300	100
53	100	100	100	100	100	100	300	100
54	100	100	100	100	100	100	300	100
55	100	100	100	100	100	100	300	100
56	100	100	100	100	100	100	300	100
57	100	100	100	100	100	100	300	100
58	100	100	100	100	100	100	300	100
59	100	100	100	100	100	100	300	100
60	100	100	100	100	100	100	300	100
61	100	100	100	100	100	100	300	100
62	100	100	100	100	100	100	300	100
63	100	100	100	100	100	100	300	100
64	100	100	100	100	100	100	300	100
65	100	100	100	100	100	100	300	100
66	100	100	100	100	100	100	300	100
67	100	100	100	100	100	100	300	100
68	100	100	100	100	100	100	300	100
69	100	100	100	100	100	100	300	100
70	100	100	100	100	100	100	300	100
71	100	100	100	100	100	100	300	100
72	100	100	100	100	100	100	300	100
73	100	100	100	100	100	100	300	100
74	100	100	100	100	100	100	300	100
75	100	100	100	100	100	100	300	100
76	100	100	100	100	100	100	300	100
77	100	100	100	100	100	100	300	100
78	100	100	100	100	100	100	300	100
79	100	100	100	100	100	100	300	100
80	100	100	100	100	100	100	300	100
81	100	100	100	100	100	100	300	100
82	100	100	100	100	100	100	300	100
83	100	100	100	100	100	100	300	100
84	100	100	100	100	100	100	300	100
85	100	100	100	100	100	100	300	100
86	100	100	100	100	100	100	300	100
87	100	100	100	100	100	100	300	100
88	100	100	100	100	100	100	300	100
89	100	100	100	100	100	100	300	100
90	100	100	100	100	100	100	300	100
91	100	100	100	100	100	100	300	100
92	100	100	100	100	100	100	300	100
93	100	100	100	100	100	100	300	100
94	100	100	100	100	100	100	300	100
95	100	100	100	100	100	100	300	100
96	100	100	100	100	100	100	300	100
97	100	100	100	100	100	100	300	100
98	100	100	100	100	100	100	300	100
99	100	100	100	100	100	100	300	100
100	100	100	100	100	100	100	300	100

The results of the tests conducted on the various samples of the material under consideration are given in the following table:



Table 3 continued.

- Col. 3: Prices are for No.  $2\frac{1}{2}$  sliced fancy pineapple, f.o.b. Hawaiian, from published quotations supplemented by trade information.
- Cols. 4, 5, and 6: Prices given in columns 1, 2, and 3, respectively, in per cent of their 1935-1939 averages--canned clingstone peaches, \$2.574; canned Bartlett pears, \$2.990; canned pineapples, \$3.60.
- Col. 7: Weighted combination of relatives in columns 4, 5, and 6 using the following weights--canned clingstone peaches, 8; canned Bartlett pears, 3; canned pineapples, 6.
- Col. 8: From table 1, column 3.
- Col. 9: Column 7 divided by column 8.



Сотрудники и специалисты по охране лесов

Ученые и специалисты по охране лесов

Сотрудники и специалисты по охране лесов

Сотрудники и специалисты по охране лесов

Сотрудники и специалисты по охране лесов

Сотрудники и специалисты по охране лесов



TABLE 4

Actual and Estimated F.O.B. Prices of California Canned Apricots  
(1926-27 Through 1950-51, Excluding 1940-41 through 1946-47)

Year, June through May	Actual price	Estimated price	Difference: column 1 minus column 2	Column 3 as per cent of column 1
	1	2	3	4
	dollars per case			per cent
1926-27	3.85	3.97	-0.12	- 3.1
1927-28	3.97	3.80	0.17	4.3
1928-29	3.67	3.65	0.02	0.5
1929-30	3.97	4.12	-0.15	- 3.8
1930-31	3.32	3.26	0.06	1.8
1931-32	2.64	2.86	-0.22	- 8.3
1932-33	2.23	2.39	-0.16	- 7.2
1933-34	2.37	2.63	-0.26	-11.0
1934-35	3.47	3.17	0.30	8.6
1935-36	2.93	2.90	0.03	1.0
1936-37	2.75	2.61	0.14	5.1
1937-38	3.02	2.88	0.14	4.6
1938-39	2.55	2.47	0.08	3.1
1939-40	2.77	2.70	0.07	2.5
1947-48	5.20	4.98	0.22	4.2
1948-49	4.55	4.74	-0.19	- 4.2
1949-50	4.11	4.34	-0.23	- 5.6
1950-51 <sup>a/</sup>	4.83	4.74	0.09	1.9

<sup>a/</sup> Preliminary.

Sources:

- Col. 1: From table 1, column 1.
- Col. 2: Estimated by equation 2, table 5.
- Col. 3: Column 1 minus column 2.
- Col. 4: Column 3 as per cent of column 1.



TABLE 1

Actual and Estimated F.O.B. Prices of California Canned Apples  
(1926-27 Through 1950-51, Excluding 1940-41 through 1946-47)

Year June through May	Actual price 1	Estimated price 2	Difference: column 1 minus column 2 3	Column 3 as per cent of column 1
	Dollars per case			per cent
1926-27	3.85	3.97	-0.12	-3.1
1927-28	3.97	3.80	0.17	4.3
1928-29	3.67	3.65	0.02	0.5
1929-30	3.97	4.12	-0.15	-3.8
1930-31	3.32	3.26	0.06	1.8
1931-32	2.64	2.86	-0.22	-8.3
1932-33	2.23	2.32	-0.10	-4.5
1933-34	2.37	2.63	-0.26	-11.0
1934-35	3.17	3.17	0.30	8.6
1935-36	2.93	2.90	0.03	1.0
1936-37	2.75	2.61	0.14	5.1
1937-38	3.05	2.88	0.16	4.6
1938-39	2.55	2.47	0.08	3.1
1939-40	2.14	2.70	-0.56	-2.5
1940-41				
1941-42	2.20	1.98	0.22	4.5
1942-43	1.55	1.74	-0.19	-12.3
1943-44	1.11	1.34	-0.23	-20.7
1944-45	1.83	1.74	0.09	4.9

a/ Preliminary.

Sources:

- Col. 1: From table 1, column 1.  
Col. 2: Estimated by equation 2, table 2.  
Col. 3: Column 1 minus column 2.  
Col. 4: Column 3 as per cent of column 1.



TABLE 5

Statistical Analyses of Factors Affecting Annual Average F.O.B. Prices  
of California Canned Apricots, 1926-27 to 1950-51

Equation number	Multiple regression equations			$\bar{R}$ Adjusted coefficient of multiple correlation
	Dependent variable	Constant term	Independent variables and their net regression coefficients (figures in parentheses are t-ratios and in brackets are beta coefficients)	
1	$X_1$	-13.296706	$-0.373000X_2$ (2.611361) [0.276635]           + $6.998013 \log_{10} X_3$ (11.851392) [1.799743]           + $0.029628X_4$ (4.989699) [0.809962]	0.964
2	$X_1$	-25.552064	$-.401000X_2$ (3.562675) [0.297282]           + $7.702165 \log_{10} X_3$ (14.410997) [1.980837]           + $6.952885 \log_{10} X_4$ (6.760533) [0.970795]	0.977
3	$X_1$	-23.169750	$-1.985904 \log_{10} X_2$ (3.319810) [0.270757]           + $7.701868 \log_{10} X_3$ (13.939349) [1.980760]           + $7.160005 \log_{10} X_4$ (6.834636) [0.999714]	0.975
4	$\log_{10} X_1$	-2.853860	$-0.208832 \log_{10} X_2$ (2.332088) [0.227724]           + $0.991693 \log_{10} X_3$ (11.990025) [2.039878]           + $1.008368 \log_{10} X_4$ (6.430054) [1.126088]	0.964

$X_1$  = annual average f.o.b. price of California canned apricots (in dollars per case);

$X_2$  = domestic shipments of California canned apricots (in units of 1,000,000 cases);

$X_3$  = index of United States nonagricultural income (1935-1939=100);

$X_4$  = adjusted index of prices of competing canned fruits (1935-1939=100).



$X^0$  = weighted index of prices of combined cotton and wool (1932-1933=100).

$X^3$  = index of prices of raw cotton (1932-1933=100).

$X^5$  = domestic shipments of cotton (in units of 1,000,000 cases).

$X^7$  = annual average 100% price of cotton (in dollars per case).

1	$x^0$	-5.22380	$(0.55115)$ $(5.33508)$ $-0.508835 \log_{10} x^5$	$(5.032219)$ $(11.22052)$ $+ 0.22123 \log_{10} x^3$	$(1.75200)$ $(2.43024)$ $+ 1.00399 \log_{10} x^7$	0.221
3	$x^3$	-5.22380	$(0.55115)$ $(3.31887)$ $-1.22280 \log_{10} x^5$	$(1.22280)$ $(13.22280)$ $+ 1.22280 \log_{10} x^3$	$(0.22280)$ $(2.22280)$ $+ 1.22280 \log_{10} x^7$	0.222
5	$x^5$	-5.22380	$(0.55115)$ $(3.22280)$ $-1.22280 \log_{10} x^5$	$(1.22280)$ $(12.22280)$ $+ 1.22280 \log_{10} x^3$	$(0.22280)$ $(2.22280)$ $+ 1.22280 \log_{10} x^7$	0.222
7	$x^7$	-13.52280	$(0.55115)$ $(5.22280)$ $-0.31200 \log_{10} x^5$	$(1.22280)$ $(11.22280)$ $+ 0.22280 \log_{10} x^3$	$(0.22280)$ $(1.22280)$ $+ 0.22280 \log_{10} x^7$	0.222
number of variables	variables included	constant	(figures in parentheses are t-ratios and in brackets are raw coefficients) Independent variables and their raw regression coefficients			coefficient of multiple correlation
Multiple regression analysis						0.222

OF COTTON AND WOOL 1932-33 TO 1939-40  
STATISTICAL ANALYSIS OF FACTORS AFFECTING COTTON AND WOOL PRICES